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**The Iowa Blind History Archive  
History of Blindness in Iowa - Oral History Project  
Interview with [Name]  
Conducted by [Name]  
[Date]  
Transcribed by [Name]**

**NOTE: Any text included in brackets [ ] is information that was added by the narrator after reviewing the original transcript. Therefore, this information is not included in the audio version of the interview.**

**Robert Simmons, 85, Clinton, Iowa  
Karla Ice  
Clinton, Iowa  
3/30/2011**

**Karla Ice: Today we are interviewing Dr. Robert Simmons. He lives in Clinton, Iowa. The location of the interview is his home in Clinton. The date is March 30, 2011 at about 2:30. I'm Karla Ice, and this is the first time that Dr. Simmons and**

**I have met. Dr. Simmons, do we have your consent to be interviewed?**

**Robert Simmons: Yes.**

**Ice: Very good. And, now may I ask you what your age is?**

**Simmons: I am 85 years of age.**

**Ice: Okay, and where were you born?**

**Simmons: Clinton, Iowa.**

**Ice: So, you've lived here all your life.**

**Simmons: All my life.**

**Ice: Just briefly, about your education and occupation?**

**Simmons: Okay. The only time I did not live in Clinton, Iowa was the time I served in World War II, and the time I attended college at The University of Chicago.**

**Ice: Okay. And, you took education to become...?**

**Simmons: A Doctor of Optometry. That was my degree.**

**Ice: Okay. And, you practiced for how many years?**

**Simmons: Well, approximately 50 years.**

**Ice: Okay. And, did you have a solo practice? Were you in a clinic without other...?**

**Simmons: No. I began as a solo practitioner, and gradually took in various interns, and finally turned the practice over to my son, who is also a Doctor of Optometry now, when he graduated. Then, I continued to assist other optometrists in the area, who had vacations, deaths in the family, different things. I would sort of cover for them, so to speak. But, I didn't go as far as to prevent me from coming home at night. So, it was more Dubuque, Cedar Rapids, Iowa City, Illinois, Rock Island, because I also have an Illinois license. And, the Davenport area. That was for the last, maybe, 20 years that I did that.**

**Ice: Okay. Very interesting. And then, at what point did you start to lose your vision, and how old were you at that time?**

**Simmons: I was 76 years of age. And so, this forced me to be retired, because at that age I was still helping other practitioners and such as that on a temporary basis, but, I got to the point where I could no longer see. And so, that ended my career.**

**Ice: And, what was the cause of your blindness?**

**Simmons: Macular degeneration. It started out in the one eye as the dry macular degeneration, and within six months it swiftly went to wet macular degeneration. So, I was legally blind at that moment.**

**Ice: Okay. And, that affected both eyes?**

**Simmons: Yes.**

**Ice: And, what kind of treatment was available at that time, or what kind of treatment had you had, if any, for it?**

**Simmons: The first time there was one doctor that specialized in retinal ophthalmology in Davenport, Iowa. And, he confirmed my diagnosis; that it was macular degeneration, as we were calling it in those days, macular edema. And, the only thing that he could possibly do is by...and there wasn't even laser really in those times, was just to say, "There's really nothing we can possibly do for you at this time." But, surprisingly enough, six months later, when I got the wet, I went to another retinal specialist that had opened up in Davenport. I personally knew these men, so this all helped. And, at that time, laser had been developed, and they suggested perhaps doing this, as in wet macular degeneration there are capillaries that bleed. It's almost like a blood blister on your finger, and the blood runs, and of course it spoils the macula and the fovea of the eye. So, by doing the laser they really didn't correct anything. All they did was stop the bleeding. In fact, there's scar tissue. And, I had 40 [Correction: 20] treatments in my right eye, and 40 [Correction: 20] treatments in the left eye. And, there was even a new technique called photo-dynamic therapy, which is a cold laser. The hot laser, the trouble was if you hit a spot, it would spread slightly. So, with the cold laser, I mean, it was more pinpoint. The trouble is though, this all occurred perhaps all five years too soon.**

**Nowadays, I'm going every three months to Iowa City [clinic] to the Retinal Department, and they inject into my**

eye, by hypodermic needle, a drug called Avastin, which is a drug that was originally for people with colon cancer to prevent bleeding. And, I do have this to prevent further bleeding, but they will invariably tell me every time if only we could have done this, say two years ago or five years ago on you, because there is no room for any improvement, because of the scar tissue in the back of my eyes, apparently. So, we're currently just trying to keep it from spreading on out.

**Ice:** Very interesting. And, naturally when you started losing your vision it changed the way you need to do things around the house, and so forth. Can you tell us about some of those experiences?

**Simmons:** Yes, you just...you know there's a difference between the dry macular degeneration. Most people get this at the beginning. If you notice, they lose visual acuity, which means that surprisingly enough, they can probably still drive a car, not as well as before. And, they can possibly read with the use of a magnifying glass or something like that. But, wet macular degeneration affects the vision, so there's a definite difference between visual acuity, which is like the letter chart and things, and vision. When you lose your vision, you are legally blind, and the definition for legal blindness is if you cannot see better than 20/200 in the better eye. And, it's just a definition I think they came up with in, I think the 1930's, if I'm not mistaken. Something for legal purposes. I mean 20/200 in the better eye is pretty bad. So, as a result, I mean, to do things, yes. Around the house...I can no longer drive, I can no longer do this or that, but my salvation was when a representative of

**the Iowa Department for the Blind by the name of Jonathan Ice recommended I take a course in Des Moines, and I did, and I learned a great deal from this course. I learned Braille, and to this day I will mark soup cans and things, such as this in the pantry. And, I can read what is in the can without having to take it and put it under magnification. I also learned cooking, and it happened to be around Thanksgiving time, and I was assigned the assignment to make the dressing for the turkey, and also stuff it and also roast it. So, this was an experience. And, this was all done with what they call sleep shades. They're black sleep shades. We were told to wear these for everything all the time we were in Des Moines, except for just a lunch period. We would get a little break for the lunch period to take them off and go to lunch.**

**Another thing was, the thing I somewhat dreaded. We were required to take every course that they offered, and one course I hesitated about was woodworking. And, here it was with all of these industrial power machines, and saws and things, such as they had, and here I am completely blinded. But, with the proper instructions and everything like that, why my assignment was to make a picture frame for my diploma, if I graduated. And, I believe there were probably about a half a dozen in the class. Two were women who sort of dropped out. I mean, you either have to take every one of the courses they recommend, or else, you know, you aren't eligible to graduate, shall we say. And, what else did we learn? We learned about the computer. Right now things slip my mind what all we had. Oh, the big thing was orientation. To take us outside and to have us go downtown in Des Moines with heavily traffic intersections and everything, and we had to go around the block with a**

**white cane. And, to ask directions we had to stop and ask strangers to tell us which way to go and everything. And, in fact, after a couple of days, we had to go and get on a bus and actually go to a grocery store and to pick out some of the groceries for our so-called Thanksgiving dinner. And, again, it was all vocal. We would still have the sleep shades on and our white cane, but this forced us...I mean to learn new techniques and to use other senses rather than the visual sense, which was so important. But, I mean, we had to use it by oral and other means, such as this. That was a big turning point in my visual history was that week, or so, that I did spend in Des Moines. And, I learned a great deal and gained a lot of confidence. And, I still use most of that stuff nowadays. Little things about like how to thread a needle, how to tell different coins and bills. I invariably use that every day.**

**Ice: And, how do you tell different bills apart, since they all are the same size?**

**Simmons: Well, it's on the sides. Quarters and dimes have ridges, and pennies and nickels are smooth, and you can tell from the sides from there. And, the paper bills it's the way that you fold them. And, this tells the difference, I mean, so that you can positively tell the denominations of them.**

**Ice: So, you fold each denomination in a different way?**

**Simmons: In a little different way, that's right.**

**Ice: And, you mentioned using Braille to mark soup cans. So, then you Braille a piece of paper that you attach to...**

**Simmons: A rubber band around it.**

**Ice: A rubber band around the can.**

**Simmons: Yeah.**

**Ice: Very good.**

**Simmons: I do not really have any...the instrument to print the Braille, but, I mean, like I still read it and I can tell what's what, yeah.**

**Ice: Okay. The experience of preparing the turkey in Des Moines. That sounds like that was a really interesting experience. How did it all go?**

**Simmons: Well, you weren't suppose to peak underneath those blinders, which I didn't, but how did it go? It was really very, very interesting. We just stuffed the turkey and everything such as this, and I purchased the turkey to start with and brought it back to the Department. And, that was my [assignment] to mix the dressing and everything, and then I just stuffed it and put it in the roaster, and waited out the time and carved it afterward.**

**Ice: So, you had to measure ingredients. How to you measure things?**

**Simmons: Thank goodness they do have different implements, which I use to this day. Different measuring cups, and teaspoons and things such as this, which is a big**



**help. Otherwise, again, it's usually by touch as opposed to visual.**

**Ice: And, you can feel if the cup and spoon is full or half full, and...**

**Simmons: Right.**

**Ice: Okay. And, what about the way that you keep up with the news, and do reading and things like that?**

**Simmons: Well, of course I do have the closed circuit television, which helps me for detail, but otherwise I do have my radio and I have the radio station from Augustana College, and that's WIV [WVIK] I believe, or something. Off-hand, I can't remember what it is. I can get it for you. And, I listen to that while having breakfast, and it brings me up to date on the latest news by the radio. It's a wonderful service. And, if I want more detail, then I do get, of course, the morning paper, and I do love to work crossword puzzles, and crypto quotes. And, of course, there I have to use my CCTV for this. And, I do have...**

**15:00**

**Simmons: I became so dependent upon this instrument that I now have three of them, so I don't have to run upstairs and downstairs, and to the lower level and different things. So, I have them scattered. I still can't get over...some people say they are expensive. Yes, but, I mean, think of the alternative. I mean, they just can't read, and they can't do a lot of things, but I can do everything, you know, I can pay my**

**own bills, write my own checks. I can read, I can work the puzzles, and I can do everything with that instrument. It's really a godsend, and is money well-spent.**

**Ice: Yes. Yes, that's amazing; you can even work crossword puzzles?**

**Simmons: Yes, right. And, looking up in the dictionary, which I also purchased at the Iowa Department for the Blind, a large print dictionary, which I've just practically wore out by now.**

**Ice: Okay. The way the CCTV works is that it has a magnifying lens attached to it?**

**Simmons: Yes, and you can enlarge it by magnification. And, matter of fact, it gives you different means. You can have the black type on white. You can reverse it and have white type on black background if that's easier for you. You can also get it in color, or get it in just plain black and white. And, different things appear different in the papers and that, and in magazines.**

**Ice: And, you mentioned the radio station that you listen to through Augustana. And, that is from the news from newspapers, or which newspaper?**

**Simmons: They read different newspapers, but I usually catch it the first thing in the morning, with generalized news, and it's a wonderful program. I mean they actually interview...have interviews with other people. And, I think it must be a national, what...public broadcasting system or**

**something that they're connected to. So, it's actually better than the newspaper that we get.**

**Ice: Very interesting. And, then you also use computers?**

**Simmons: Um-hum.**

**Ice: And, was use of computers something you were already doing before your blindness, or was that something you learned after?**

**Simmons: Well, I started computers, yes, when they first came out. And, of course, every year they changed something different. So, in my lower level in the basement I have the old Apple, the McIntosh and everything; if you know anybody who would like some old ones. (Laughter) And so, I sort of upgraded as they upgraded, but I took a course at the junior college on computers, but again, it changed. Nowadays, electronics have changed to digital. They've changed things so much that it's very difficult to keep up with them; but now I use it definitely for emails, and to look up different things, you know...recipes. And, since I'm a care-giver I have to prepare things a little bit different. So, they do have a couple programs. One is called ZoomText, which I'd be lost without. And, you can magnify everything, which I just likely have it on at all times. And, the other is JAWS.**

**Ice: JAWS?**

**Simmons: Yes, JAWS, which talks back to me. So, when I'm typing and things such as this, I mean, it will correct me. It**

**will correct my spelling and my syntax and everything else. So, I mean the two things, they're wonderful programs they have.**

**Ice: And, JAWS will read to you as you're typing?**

**Simmons: Yes.**

**Ice: And, it will also read if you look up an Internet site, it will read to you what's on the screen?**

**Simmons: Yeah, exactly.**

**Ice: So, you get information that way.**

**Simmons: Right.**

**Ice: Very good. And, let's see, back to maybe some of the housekeeping things a little bit. I think there's some markings are put on things like appliances and thermostats so you can...**

**Simmons: Yes. Mr. Ice has put on what they call Hy-Mark, and it is something that hardens and I have it on my microwave, of course, under the different numbers. I have it on the oven on the stove top, on the dishwasher, and any number of things; on the thermostat, so I can tell what the temperature is in the room where I'm at. And, just by feel, and it's just a little dot. I know where everything is at.**

**Ice:** Okay, and you also have the role of being a care-taker for your wife. Are there techniques you have used or adaptations you have come up with in that role?

**Simmons:** I do all the cooking. I wash all the dishes. I make the bed. My mother taught me a lot. And, I think the big thing is in the cooking situation. There are things that I wish I could do faster. I mean, I get things accomplished, but I'm really slowed down. I've always been a person that liked to do things rapidly. So, opening packages, perhaps measuring and pouring liquids from a jar into a glass. Thank goodness they taught me how to do that in Des Moines. Otherwise, I'd spill all over the place.

**Ice:** And, how do you do that in order to keep from spilling?

**Simmons:** Keep one finger angled inside for milk. I use a dark glass or a jar or a cup, so I can get some contrast. Contrast is a big thing, right.

**Ice:** Okay. Can you think of any other adaptations or things that you do differently?

**Simmons:** Grocery shopping. Yes, I walk every day and between here and the nearest grocery store is probably about a mile away. And, it's probably through the busiest intersections in the city. I do use my white cane, because this seems to be a signal for the drivers rather than to take a chance, because cars go so fast, and they're on their cell phones nowadays and everything else. But, that white cane just seems to be a flag for oncoming motorists, and everybody respects it very much so. And, they flag me on or

**honk as if to say, “Go on ahead.” And, at the grocery store, I usually try to find someone, and most grocery stores are very good about this, to find an employee to help you go around and pick out the groceries. However, I do have portable closed circuit TV’s, and so I can do pretty well with these when the opportunity presents itself, and I do carry those around with me.**

**Ice: Okay, that’s something new to me. How does the portable CCTV...How big is that? How does that work?**

**Simmons: Oh, how can I describe it to you. It’s about, oh, 4 x 6 inches, yeah. I’ll show it to you when we get done.**

**Ice: Okay. Very interesting. And, what about transportation. That’s often an issue.**

**Simmons: That is my big problem. When I got the wet macular degeneration...on a Sunday afternoon I said to my wife, I’m going to run up and get some cold slaw to eat with our supper. And, I went to turn into the place and an oncoming car was coming rapidly, and I just had to step on the gas to get on their lawn, just to get out of the way. So, when I got home, I gave the keys to my wife, and I said, “That’s it. I do not want to hurt anybody, and I not only wouldn’t want [them] to hurt me.” So, that was the end of my driving.**

**For the next few years though, my wife still drove, and it did help out a great deal. Now, she no longer drives, and this is presenting a problem at the present time, even though the city has a municipal transit authority. And, we use this most all the time. It’s just \$2. I don’t know how you**

can buy gasoline for \$2 nowadays, but they will take us and drop us off at a doctor's office, at the grocery store or some[where] if we want to. But, like I say, I usually walk to that. But, if I'm carrying heavy things like gallons of milk and canned goods, which can get pretty heavy, then I would probably use some of that. I'm also in a coffee group. And, the men are wonderful. They pick me up in the morning and on the way home they will ask if there's any errands I have to do before I go home. So, I hate to take advantage of them, but I do stop and pick up prescriptions and maybe that gallon of milk, which is heavy to carry or something. And, also, my wife's sister who has recently moved back into the area, even though she's busy with her volunteer work and different activities, she's pretty good about taking us around. And, I do have a woman that comes in to clean every two weeks, to help me clean, like, the bathrooms and the kitchen. And, she's very good about, you know, taking me around to do errands. But, this has presented a problem that no one in the family does drive. You don't know how much you miss that, but I take buses, you know, the bus service is very good. So, I have to do a little walking to catch it, but no problem, at least I can get there.

**Ice:** Okay, very good. And, you mentioned your coffee group. Is that something you've belonged to for a long time?

**Simmons:** Oh, for some time, yes. Even when in the days when I could see who was there. Right. Yes, they're just a wonderful group. At our age we loose some and get a few new ones and things such as that, but we do solve all of the problems of the world it seems like every morning.

**Ice: So, you get together every morning?**

**Simmons: Five days a week. And, it's a chance to laugh and to needle each other, but this is what we need; rather than be so serious all of the time.**

**Ice: About how many people are in the group?**

**Simmons: Well, we usually keep it at twelve, but now we're down to about six, but we're all very faithful about the whole thing, about coming every morning. At twelve people you usually have two or three conversations going at once. With six people, you have one conversation, which is sort of nice; people join in.**

**Ice: What about other community activities or groups that you go to or belong to?**

**Simmons: I am in a group called Citizens [Correction: Seniors] Versus Crime, which is headed by the Sheriff's Department. And, I was asked to join that, and we do meet once a month. We also have our VIP (Visually Impaired People), our support group which also meets once a month. And, what else...Well, I play golf, I mean somebody has to tell me which way the ball goes and which tree it's gone behind or something, but at least it gets me outside into the fresh air; and bowling, about the same thing. I do play cards. We play bridge probably about once a week. I have very, very large cards that I can see. And, people...the other players are pretty good, you know. Occasionally you'll make mistakes and things with the cards you can't see, but they accept all of this nowadays. So, but as far as other**



**volunteer groups, there's probably some that I just can't think of right now.**

**Ice: It sounds like you keep active and keep busy.**

**Simmons: I try to keep active.**

**Ice: Yes. Do you have any other comments about life with your loss of vision, or the adaptations you've made? Did you have any other more comments about the macular degeneration? I should mention here that he prepared a written document that gives a very understandable explanation of macular degeneration and the difference between wet and dry, and the treatments for that. And so, that will be submitted along with this oral interview.**

**Simmons: Yeah. That's one other thing that I do, and Jonathan sort of uses me, I mean. People who are just developing macular degeneration. I mean, there's an area there where people become quite depressed, and he will often times, and other people also do this, if they'll know somebody. They'll ask me if I wouldn't talk to them about the situation. I mean, to assure them that they're never going to go blind, as we know it. Legally blind, yes, but we still have our peripheral vision and we can still get around.**

**30:00**

**Simmons: I try to encourage them, because as I said in that report, macular degeneration has a way of pushing every button you have, and it can bring out anxiety and grief, and**

**depression and all of the bad things. So, it's something you have to overcome.**

**Ice: And, it certainly sounds like you have done a good job of overcoming all of those things. You did mention a little bit about the quirkiness of having macular degeneration, where you can see something insignificant out on the edge.**

**Simmons: Yes. People cannot understand this, but I will see something on the floor with my peripheral vision, and I will, you know, pick it up and people will invariably...if it's happened once, it's happened dozens of times...they'll say, "How can you see that?" Well, I can't see straight ahead, I can't even see who I'm speaking to as a rule, because I cannot see faces, but that peripheral vision, it's just something with a contrast. I can sort of pick it up. It's very, very blurred, but there it is.**

**Ice: Okay, that's an interesting sidelight. Do you have any other comments? Otherwise, I think we'll conclude the interview.**

**Simmons: Okay. I'll probably think of something and we can...**

**Ice: Sure, and that can always be added later. Well, thank you so much for your time and your contribution.**

**Simmons: Well, you're welcome.**

**31:41**

**(End of Recording 1)**

**(Beginning of Recording 2)**

**Ice:** This is an extension of the interview with Dr. Bob Simmons. We're going to be talking about some of the optical aids that are available to people these days.

**Simmons:** There's always something that comes out, and it's always a very helpful thing. As you know, macular degeneration...there's no cure for it. And, as a result, I mean, we are depending more and more daily, but with electronic aids with the digital age we're in. I mean, they're coming out with some wonderful different things. And, also, with my background, my profession and my son's background, we have closeness to different companies and different things. And, we keep up on these things about low vision. So, if you want me to I'm going to bring out some of the more important things perhaps.

**Ice:** Sure.

**Simmons:** And, bring it to people's attention. Because it's something that a lot of people don't realize, but, I mean, rehabilitation and low vision is very important. It's a profession in itself, really, but people just don't know that much about it or what to do or how to go about it. And, that's where we've been a little bit lax in bringing this information to the public.

**Ice:** Do you want to mention some of those things now, or would you prefer to write it up.

**Simmons: Let me write it up, yeah.**

**Ice: Okay, very good.**

**Simmons: Because invariably, I'd probably forget something important.**

**Ice: Okay. Thank you very much.**

**1:50**

**(End of Recording 2)**

**Jo Ann Slayton**

**04/30/2011.**

**[After the interview, Mr. Simmons submitted information on macular degeneration and devices he wished to include in his transcript. The information is as follows:**

**I was born in 1925 and was an intensely visual person, who enjoyed an active lifestyle. My life occupation was as a Doctor of Optometry. I practiced my profession for fifty years.**

**In 2001, at the age of seventy-six, I developed macular degeneration in one eye. For six months I was fine, until the loss was followed swiftly by the loss of my vision in my other eye from full-blown wet macular degeneration. Laser treatments could not stop the progression of the condition, and I was forced to give up driving, a significant disadvantage. My low vision was a tremendous blow to me. I struggled with managing my business affairs, and struggled with depression.**

**Today, at eighty-five, I am into late stage macular degeneration, with 20/800 in one eye, and 20/400 in the other. Yet my outlook is brighter than it was several years ago. Since I am still alive and healthy, I believe I am meant to be happy, and so I've decided to do so. I am a full-time care-giver to my wife, and we live independently. I take long walks in the neighborhood, regularly crossing intersections of every size, shop for groceries, and use the local buses. I volunteer at charities, helping other seniors. I bowled and play cards, attend a morning coffee group, dine out often and write my own checks. I particularly enjoy books on tape, and have become an avid listener. I read more now with my ears than I used to with my eyes.**

**What enables me to survive, to be happy? How do I manage to meet the enormous challenge of vision loss, combined with being a full-time care-giver? How did I manage to turn a larger-than-life lemon into lemonade? I do have some important advantages.**

**First, as an optometrist, I knew about optics and how magnifiers work, and could experiment with different models, finding the right one to maximize my sight. Just as I used to solve vision problems through careful testing. Secondly, I am quite straightforward about my vision loss, and I do not hesitate to ask acquaintances to identify themselves or waiters to help with menus. I believe low vision is nothing to be embarrassed about. Finally, my son is a Doctor of Optometry and has access to rehabilitation services, a support group, and a full range of optical aids. But what about the 1.5 million other Americans who have vision loss from macular degeneration and may not have these advantages? There may not be another medical condition in this country that is so common, that impacts**

**daily living as profoundly, and yet is so little publicized. Many with macular degeneration are frustrated that there aren't better treatments, and they want to know exactly what is known about macular degeneration, and the status of current research.**

**Macular degeneration does not blind. It leaves peripheral vision intact, and this remaining vision is a saving grace. You can learn to maximize your remaining sight through optic aids and rehabilitation, and it will take you a long way to maintaining a lifestyle you enjoy.**

### **What is ARMD?**

**Age-Related Macular Degeneration is the leading cause of adult vision loss in the United States. It affects more people than all of the better known eye diseases combined; glaucoma, cataracts, and diabetic retinopathy. One out of twenty-five Americans over sixty-five suffers significant vision loss from advanced macular degeneration. Clearly, if you have ARMD, you are not alone.**

**Macular Degeneration dismantles central vision painlessly and silently, leaving peripheral vision intact. As a result, people with advanced macular degeneration do not feel any change in their eyes, nor do they appear any different to their friends or family, but their experience of the world and of their own capacities change radically. Because macular degeneration leaves peripheral vision intact, people with ARMD can see whatever rests at the edges of their vision, but cannot see clearly whatever they look at directly. It takes away what we most want to see, and leaves visible what appears to be irrelevant. You can't read or drive or recognize faces, but you can pick up a piece of thread off the carpet, but that is not high on my list of activities.**

**Why has macular degeneration been a big secret?**

**Unlike cataracts, which can be easily seen, or glaucoma, which can easily be measured, macular degeneration is more difficult to analyze and to treat, so it wound up a bit lower on the research priority list. Secondly, declining vision was simply accepted as the result of “just growing old”. People now days are living longer and more healthy than their parents and grandparents; a sixty-five-year-old may have twenty to forty more years of reading, entertaining, traveling, and sports ahead of them, and may not be ready to retire. This is why insurance companies do not cover visual aids or therapy for low vision. The truth is that macular degeneration is complicated: there is no easy answer to its cure.**

**Macular Degeneration isn't just about your eyes.**

**Most people say that they would rather lose a limb than an eye. Surveys have shown that vision loss is among the most feared afflictions, among with cancer. Why? Because eyesight affects every aspect of life: mobility, physical activity, communication, appearance, psychological health and so on. Macular Degeneration is tailor-made to push every button we have. It can raise feelings of grief, helplessness, depression, fear, anxiety and anger.**

**Macular Degeneration explained.**

**Our eyes are like cameras. Light enters our eye through the pupil, is focused by the lens, and falls on the retina at the back of our eye. The retina picks up light and converts into nerve signals. The retina sends the nerve signals through**

**the optic nerve to the brain, which “develops” into the images we actually see.**

### **The Macula**

**The retina has two types of photoreceptor cells that convert light into electrical messages for the optic nerve to transmit: rod cells and cone cells, so named for their shapes. There are many more rod cells that are responsible for peripheral vision. Cone cells are concentrated in the center of the retina – and are responsible for central vision, color perception and sharp images (acute vision). The capacity of cones to distinguish detail is one hundred times greater than rods. We need them to tell the difference between forest green and black, and to see precise detail. The fovea is the very center of the macula, and contains only cone cells. This tiny area is responsible for so much of what we see. In macular degeneration, the rods and cones in the macula begin to die, reducing the number of cells to transmit visual signals to the brain. In addition to the rods and cones, there are three other key players (membranes) in macular degeneration. They supply a delivery line for nutrition (oxygen) to the macula and whisking away waste. Dying from lack of oxygen and clogged with refuse is what causes macular degeneration.**

### **Two types of ARMD**

**There are two types of macular degeneration, commonly called dry and wet. All cases are thought to start with the dry form. Between 10 percent and 15 percent of the people who show signs of dry macular degeneration eventually develop the wet form. Dry macular degeneration develops slowly and silently. They gradually lose visual acuity, while**



**wet loses vision. Dry type can usually continue to drive and read, but blurred.**

### **Wet macular degeneration**

**Wet ARMD is called “wet” because it is characterized by abnormal, leaky blood vessels that grow underneath the retina in the choroid layer. Ninety percent of the people who develop wet macular degeneration become legally blind.**

### **Risk Factors of acquiring ARMD**

**Sex: Women over the age of seventy-five have twice the incidence of early macular degeneration and over seven times the incidence of developing wet macular degeneration.**

**Race: Caucasian, rarely seen in African-Americans**

**Genetic factor: Familial affect**

**Blue and light colored eyes**

**Cigarette smoking**

**Cardio-Vascular disease**

**UV exposure**

### **Antioxidants and Vitamins for delaying ARMD:**

**Vitamins A, C, E**

**Zinc**

**Dark leafy vegetables**

**Lutein**

**Zeaxanthin**

**Low fat diet**

**Beta-carotene**

**Selenium**

**Copper**

**O.T.C. vitamins:**

## **Bausch & Lomb Preserv-a-vision I-Caps**

### **Making Things Bigger**

**There are sophisticated devices constantly being made available to us to help in daily living.**

**Magnifiers are fantastic tools. But magnifiers are also tricky. Thoughtful people give people with low vision a perfectly good magnifier as a gift, and it doesn't work at all. Technically, magnifiers always work. Their job is to magnify and they always do, but magnifiers are made in different strengths and styles, and they magnify clearly only when they are held at the correct distance. You have to choose magnifiers with the right strength (power) for your visual acuity, you have to choose the right styles for your needs, you have to use your magnifier correctly, and you have to have adequate lighting. Since magnifiers are rarely sold with instructions or users manuals, it's very easy to get the wrong one if you're choosing on your own. And it's true that the wrong magnifier will not work for you.**

**There are two broad categories of magnifiers: magnifiers for seeing up close, and telescopes for seeing things at a distance. To get the right one you need to know what you want it to do, and what the magnifier you are considering actually does.**

**There are five types of magnifiers for close viewing. 1. Hand-held magnifiers; 2. Magnifiers in non-adjustable holders that sit directly on the page; 3. Magnifiers on an adjustable support (goose neck); 4. Electronic magnifiers (closed circuit television, CCTV), computer software and hardware; and 5. Magnifiers that fit on your nose or ear.]**